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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/658,334

Applicant(s)

OH, KEUM-YONG

Examiner

JUNIOR O. MENDOZA

Art Unit

2423

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 17-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 17-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 3 – 10 and 17 – 31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1, 4, 8, 19, 25 and 27** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "single-path tree rule" in claims 1, 4, 8, 19, 25 and 27 is a relative term which renders the claim indefinite. The term "single-path tree rule" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Therefore, the examiner interprets the feature "single-path tree rule" as meaning that there is only one way to get from a root node to a child node. For example, assuming there is a tree with a root node A, which has the children nodes B and C, where B has a child node D. In the presented example the single path to reach D would be following the path A/B/D, which would indeed follow a "single-path tree rule".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 3 – 7 and 17 – 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda (Patent No US 7,020,839) in view of Berenson et al. (Pub No US 2003/0131355) further in view of Adler, Sharon et al; "Extensible Style sheet Language (XSL)", Version 1, October 15, 2001 . Hereinafter, referenced as Hosoda, Berenson and Adler, respectively.

Regarding **claim 1**, Hosoda discloses a method for transmitting a program guide, comprising the steps of:

transmitting the XML-based EPG document to a receiver, wherein a style form related to the XML-based EPG document for the receiver is provided through conversion into an extensible style sheet language (XSL) document (Each XML documents is accompanied by one or more style sheets; col. 5 lines 16-17; col. 15 lines 45-48 also exhibited 1).

However, it is noted that Hosoda fails to explicitly disclose converting an extensible markup language (XML)-based electronic program guide (EPG) into an XML-based EPG document for a user's preferred program guide.

Nevertheless, in a similar field of endeavor Berenson discloses converting an extensible markup language (XML)-based electronic program guide (EPG) into an XML-based EPG document for a user's preferred program guide (Creating a program listing that matches the user's preferences, where the program listing may be formatted using XML; paragraph [0030] [0043] also exhibited on fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda by specifically providing the elements mentioned above, as taught by Berenson, for the purpose of providing a program guide that has been customized to the liking of each customer, allowing them to receive only information about the programs that are preferred.

However, it is noted that Hosoda and Berenson fail to explicitly disclose implementing a single-path tree rule.

Nevertheless, in a similar field of endeavor Adler discloses implementing a single-path tree rule (Pages 17 – 18; where figures show that an XSL transformation can be done in a single path tree manner).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda and Berenson by specifically providing the elements mentioned above, as taught by Adler, for the purpose of implementing a simple and effective way to access nodes in a document.

Regarding **claim 3**, Hosoda, Berenson and Adler disclose the transmission method of claim 2; moreover, Hosoda discloses that the receiver stores and analyzes the XSL document related to the XML based EPG document (col. 6 lines 9-12 also exhibited on fig. 6).

Regarding **claim 4**, Hosoda discloses a reception apparatus that receives a program guide (Receiving system 10, figure 6), the reception apparatus comprising:

- a storage unit that stores an extensible markup language (XML)-based electronic program guide (EPG) document which has been converted and transmitted (Col. 17 lines 41-50 also exhibited on fig 3);
- an extensible style sheet language (XSL) document related to the XML-based EPG document (Each XML documents is accompanied by one or more style sheets; col. 5 lines 16-17; col. 15 lines 45-48 also exhibited 1);
- and an XML parser that parses the stored XML-based EPG document (Col. 15 lines 50-54);
- a graphics processor for graphically processing the parsed XML document (Col. 4 lines 38-43; col. 15 lines 55-63).

However, it is noted that Hosoda fails to explicitly disclose that the EPG is a user's preferred program guide which has been converted and transmitted.

Nevertheless, in a similar field of endeavor Berenson discloses that the EPG is a user's preferred program guide which has been converted and transmitted (Creating a

program listing that matches the user's preferences, where the program listing may be formatted using XML; paragraph [0030] [0043] also exhibited on fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda by specifically providing the elements mentioned above, as taught by Berenson, for the purpose of providing a program guide that has been customized to the liking of each customer, allowing them to receive only information about the programs that are preferred.

However, it is noted that Hosoda and Berenson fail to explicitly disclose implementing a single-path tree rule.

Nevertheless, in a similar field of endeavor Adler discloses implementing a single-path tree rule (Pages 17 – 18; where figures show that an XSL transformation can be done in a single path tree manner).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda and Berenson by specifically providing the elements mentioned above, as taught by Adler, for the purpose of implementing a simple and effective way to access nodes in a document.

Regarding **claim 5**, Hosoda, Berenson and Adler disclose the reception apparatus of claim 4; moreover, Hosoda discloses an XSL processor that processes the stored XSL document (Col. 4 lines 38-43; col. 15 lines 55-63).

Regarding **claim 6**, Hosoda, Berenson and Adler disclose the reception apparatus of claim 5; moreover, Hosoda discloses that the graphics processor processes the parsed XML-based EPG document and the XSL document (Col. 4 lines 31-43; col. 15 lines 55-63).

Regarding **claim 7**, Hosoda, Berenson and Adler disclose the reception apparatus of claim 5; moreover, Hosoda discloses a storage unit that stores and manages various XSL documents defined by a user which are related to the same XML-based EPG document (Col. 5 lines 16-17; col. 17 lines 41-50).

Regarding **claim 17**, Hosoda, Berenson and Adler disclose the reception apparatus of claim 4; moreover, Hosoda discloses that the graphics processor displays the graphically processed result on a display (Col 6 lines 18-19).

Regarding **claim 18**, Hosoda, Berenson and Adler disclose the reception apparatus of claim 5; moreover, Hosoda discloses the graphics processor displays extracted EPG-related data and display-related information on the display (Col. 12 lines 8-12; col. 15 lines 55-63).

Regarding **claim 19**, Hosoda discloses a method of receiving a program guide (Receiving system 10, figure 6), the reception method comprising the steps of:

storing an extensible markup language (XML)-based electronic program guide (EPG) document which has been converted and transmitted (Col. 17 lines 41-50 also exhibited on fig 3);

and storing an extensible style sheet language (XSL) document related to the XML-based EPG document (Each XML documents is accompanied by one or more style sheets; col. 5 lines 16-17; col. 15 lines 45-48 also exhibited 1);

parsing the stored XML-based EPG document (Col. 15 lines 50-54);

graphically processing the parsed XML document (Col. 4 lines 38-43; col. 15 lines 55-63).

However, it is noted that Hosoda fails to explicitly disclose that the EPG is a user's preferred program guide which has been converted and transmitted.

Nevertheless, in a similar field of endeavor Berenson discloses that the EPG is a user's preferred program guide which has been converted and transmitted (Creating a program listing that matches the user's preferences, where the program listing may be formatted using XML; paragraph [0030] [0043] also exhibited on fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda by specifically providing the elements mentioned above, as taught by Berenson, for the purpose of providing a program guide that has been customized to the liking of each customer, allowing them to receive only information about the programs that are preferred.

However, it is noted that Hosoda and Berenson fail to explicitly disclose implementing a single-path tree rule.

Nevertheless, in a similar field of endeavor Adler discloses implementing a single-path tree rule (Pages 17 – 18; where figures show that an XSL transformation can be done in a single path tree manner).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda and Berenson by specifically providing the elements mentioned above, as taught by Adler, for the purpose of implementing a simple and effective way to access nodes in a document.

Regarding **claims 20, 21, 22, 23 and 24**, Hosoda, Berenson and Adler disclose all the limitations of claims 20, 21, 22, 23 and 24; therefore, claims 20, 21, 22, 23 and 24 are rejected for the same reasons as in claims 17, 18, 2, 6 and 7, respectively.

6. **Claims 8, 9 and 25 – 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda in view of Adler.

Regarding **claim 8**, Hosoda discloses a method of providing an electronic program guide (EPG) selecting a program without having to scroll through the entire EPG, the method comprising:

providing an extensible markup language (XML) based EPG data (Col. 7 lines 17-30 also exhibited on fig 6);

providing an extensible stylesheet language (XSL) based EPG data (Col. 7 lines 4-9 also exhibited on fig 6);

transmitting the XSL based EPG data and the XML based EPG data to a receiver (Col. 16 lines 1-9 also exhibited on fig 6); and

decoding the XML based EPG data by using the XSL based EPG data to provide an XSL document (Col. 15 lines 55-63; col. 16 lines 22-39).

However, it is noted that Hosoda fails to explicitly disclose implementing a single-path tree rule and providing an extensible path (XPath) for accessing a subordinate node in the XML based EPG data.

Nevertheless, in a similar field of endeavor Adler discloses implementing a single-path tree rule (Pages 17 – 18; where figures show that an XSL transformation can be done in a single path tree manner)

providing an extensible path (XPath) for accessing a subordinate node in the XML based EPG data (Page 23 – 1.2.2 section).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda by specifically providing the elements mentioned above, as taught by Adler, for the purpose of implementing a simple and effective way to access nodes in a document and including tags that allows a user to navigate through a document in a fast and efficient manner.

Regarding **claim 9**, Hosoda and Adler disclose the method of claim of claim 8; moreover, Hosoda discloses editing the XML based EPG data by using the XSL based EPG data to provide desired programming for the XSL document (Col. 7 lines 31-35).

Regarding **claim 25**, Hosoda discloses a method of transmitting Electronic Program Guide data, comprising the steps of:

- producing an XML document on the basis of the Electronic Program Guide data (Col. 7 lines 17-30 also exhibited on fig 6);

- producing an XSL document for a style form related to the Electronic Program Guide data (Col. 7 lines 4-9 also exhibited on fig 6);

- and transmitting the XML document and the XSL document to a receiver (Col. 16 lines 1-9 also exhibited on fig 6).

However, it is noted that Hosoda fails to explicitly disclose implementing a single-path tree rule.

Nevertheless, in a similar field of endeavor Adler discloses implementing a single-path tree rule (Pages 17 – 18; where figures show that an XSL transformation can be done in a single path tree manner).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda by specifically providing the elements mentioned above, as taught by Adler, for the purpose of implementing a simple and effective way to access nodes in a document.

Regarding **claim 26**, Hosoda and Adler disclose the transmission method of claim 25; moreover, Hosoda discloses that the program data is data for providing an EPG for the receiver (col. 7 lines 17-31; col. 10 lines 4-9).

Regarding **claim 27**, Hosoda discloses a method of receiving Electronic Program Guide data in a receiver, comprising the steps of:

- receiving an XML document produced based on the Electronic Program Guide data (Col. 7 lines 17-30 also exhibited on fig 6);

- receiving an XSL document produced for a style form related to Electronic Program Guide data (Col. 7 lines 4-9 also exhibited on fig 6) and

- storing and parsing the received XML document and XSL document. (Col. 15 lines 50-54; Col. 17 lines 41-50 also exhibited on fig 3).

Regarding **claim 28**, Hosoda and Adler disclose all the limitations of claim 28; therefore, claim 28 is rejected for the same reasons as in claim 26.

Regarding **claim 29**, Hosoda and Adler disclose the reception method of Claim 27; however, it is noted that Hosoda fails to explicitly disclose the step of accessing a particular node in the XML document through an XPath.

Nevertheless, in a similar field of endeavor Adler discloses the step of accessing a particular node in the XML document through an XPath (Page 23 – 1.2.2 section)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda by specifically providing the elements mentioned above, as taught by Adler, for the purpose of including tags that allows a user to navigate through a document in a fast and efficient manner.

Regarding **claim 30**, Hosoda and Adler disclose the reception method of claim 27; moreover, Hosoda discloses the step of displaying the graphically processed result on a display (Col 6 lines 18-19).

Regarding **claim 31**, Hosoda and Adler disclose the reception method of claim 30; moreover, Hosoda discloses the step of displaying extracted EPG-related data and display-related information on the display (Col. 12 lines 8-12; col. 15 lines 55-63).

7. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda in view of Adler further in view on Bennington (Pub No US 2004/0168188). Hereinafter, referenced as Bennington.

Regarding **claim 10**, Hosoda and Adler disclose the method of claim 9; moreover, Hosoda discloses the step of editing the XML based EPG data, col. 7 lines 31-35. However, it is noted that Hosoda and Adler fail to explicitly disclose that the step of editing comprises adding or deleting programming from the EPG data.

Nevertheless, in a similar field of endeavor Bennington discloses that the step of editing comprises adding or deleting programming from the EPG data (Paragraph [0136], the user can select or delete channels from a viewer preference list).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hosoda and Adler by specifically providing the elements mentioned above, as taught by Bennington, for the purpose of allowing the users to modify the user interface in order to satisfy their preferences at any given moment.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JUNIOR O. MENDOZA** whose telephone number is (571)270-3573. The examiner can normally be reached on **Monday - Friday 9am - 5pm EST**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza
Examiner
Art Unit 2423

/Junior O Mendoza/
November 21, 2008

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